

yumeng ma

✉ yumeng_ma1@brown.edu | 🏠 yumengma.com | 📱 momentine

Education

Brown University

SC.M IN COMPUTER SCIENCE

Providence, RI

2022 - Present

Arizona State University

B.S. IN COMPUTER SCIENCE AND PSYCHOLOGY

Tempe, AZ

2019 - 2022

Barrett Honors College

Summa Cum Laude

Thesis: "Assessing Exhibit Interaction through Bridging the Connections Between Biometrics and Traditional Tools"

Publications

CONFERENCES

Zainab Iftikhar, **Yumeng Ma**, and Jeff Huang. "Together but not together": Evaluating Typing Indicators for Interaction-Rich Communication. CHI 2023. ACM.

Ian Gonsher, **Yumeng Ma**, Ivan Pineda-Dominguez, Matthew Lee, and Yuxin. The Mixed Reality Passthrough Window: Rethinking the Laptop Videoconferencing Experience. IHET 2023.

Ian Gonsher, Asad Khan, Ray Sun, **Yumeng Ma**, et al. Integrating Interfaces into Furniture: New Paradigms for Ubiquitous Computing, Mixed Reality, and Telepresence within the Built Environment. MAB 2023. ACM.(to appear)

Research Experience

University of California Los Angeles (HCI Lab)

RESEARCH INTERN

Los Angeles CA

2023 - Present

- Leveraging deep learning techniques to ground large language models into proactive computer vision guidance.

Brown University (Mixed Reality Window Project)

DESIGN RESEARCHER

Providence, RI

2022 - Present

- Introducing a new paradigm for the integration of AR into laptop and desktop displays, enabling local users to interact more easily and seamlessly with remote users during videoconferencing sessions.

Brown University (Robotic Arm Manipulation)

STUDENT RESEARCHER

Providence, RI

2023

- Performed and tested text-driven robot grasp tasks with CLIP-feature field in NeRF.

Brown University (HCI Lab)

DISTRIBUTED RESEARCH EXPERIENCES FOR UNDERGRADUATES

Providence, RI

2022

- Designed novel typing indicators and found that they enhance user co-presence in written communication.

Arizona State University Department of Psychology (SoLET Lab)

RESEARCH ASSISTANT

Tempe, AZ

2022

- Conducted testing and evaluation of tutoring systems to optimize learning and educational practices for underrepresented groups.

NASA Psyche Mission

COLLABORATOR

Tempe, AZ

2021-2022

- Developed a web app that enabled users to interact with the Psyche Spacecraft model and conducted user studies with biometric data analysis, revealing that the app increased public engagement.

Awards, Fellowships, & Grants

- 2023 **Tapia Celebration of Diversity in Computing Conference Scholarship**, Brown University
- 2019 - 2023 **Microsoft DisAbility Scholarship**, Microsoft
- 2022 **Google CS Research Mentorship Program (CSRMP) Fellowship**, Google
- 2022 **Virtual Grace Hopper Celebration (GHC) Scholarship**, AccessComputig

Teaching Experience

- Spring '22 **Information Assurance**, TA for Adam Doupe and Tiffany Bao, Arizona State University

Extracurricular & Work Activity

AccessComputing

MEMBER

2021 - present

- Supporting an environment for diversity and inclusivity in computing fields.

Brown University Computer Science Diversity Committee

Providence, RI

MASTER'S REPRESENTATIVE

2022 - 2023

- Participated in the drafting of the Pathways to Diversity and Inclusion Action Plan II for Brown University's Department of Computer Science.

Microsoft Contract

Tempe, AZ

MICROSOFT SUPPORT / XBOX ADVOCATE

2020 - 2021

- Assisted business clients with various Microsoft products and provided personalized support for Xbox customers accross all gaming endpoints.

Skills

Programming Python, C/C++, C#, Java, Unix/Linux, ROS

Web HTML, CSS, Javascript, Typescript, React, Vue, APIs, Git

Game Dev Unity, Godot

Data Jupyter Notebook, MySQL, MATLAB

Design UI/UX, Adobe Creative Suite, Figma, Wireframing, Fusion360, Blender

Hardware Arduino, Rasberry Pi